

**ARIZONA GAME AND FISH DEPARTMENT  
HABITAT PARTNERSHIP PROGRAM  
HABITAT ENHANCEMENT AND WILDLIFE MANAGEMENT PROPOSAL**

**PROJECT INFORMATION**

<b>Project Title: Cereus Tank</b>		<b>Project No.</b>
<b>Region/GMU: 45A</b>	<b>HPC: Southwest Arizona HPC</b>	
<b>Project Type: Water Development, Kofa National Wildlife Refuge, 45A</b>		
<b>Project Description:</b>  Replace the old Cereus Tank with a new buried system consisting of 6 foot diameter fiberglass tanks (2) and a 6 foot walk-in drinker.     <b>Wildlife Species to Benefit: Bighorn sheep 90%, Mule deer 10 %</b>		
<b>Possible Funding Partners:ADBSS</b>		
<b>Implementation Schedule:</b> Beginning: January 1, 2008 Completed: December 31, 2009		

**PROJECT FUNDING**

<b>SBG Funds Requested: \$28,000</b>
<b>Cost Share Funds: \$7,031</b>
<b>Total Project Costs: \$35,031</b>

**PARTICIPANT INFORMATION**

<b>Applicant: John Hervert</b> (please print) <b>Telephone:</b>	<b>Address:</b> 9140 E. 28 <sup>th</sup> Street, Yuma AZ. 85365
<b>AGFD Contact and Phone No.</b> (If applicant is not AGFD personnel)	
<b>Coordinated with:</b>	<b>Date:</b>
<b>Applicant's signature:</b>	<b>Date:</b>

**SEND COMPLETED APPLICATIONS TO:**  
Game Branch  
2221 W. Greenway Rd.

**Phoenix, AZ 85023**  
**mdisney@azgfd.gov**

**NEED STATEMENT/PROBLEM ANALYSIS:**

Cereus Tank generally goes dry each summer. This water source is important to bighorn sheep and other water dependant species. Redevelopment of this water source will benefit bighorn sheep by providing a reliable source of water during periods of extended drought. This project is consistent with the objectives outlined in "Investigative Report and Recommendations for the Kofa Bighorn Sheep Herd" January 2007.

**PROJECT OBJECTIVES:**

Redevelop Cereus Tank using industry standard materials and volunteer labor. The project will incorporate the "Criteria For Success" outlined in "Water Development Team 2002". This project will reduce or eliminate the need to haul water. This project will reduce the level of maintenance required to provide a reliable source of water for wildlife and decrease the level of wildlife manager time spent checking water levels and hauling water. Mule deer, and bighorn sheep will benefit from the enhanced reliability of this project. This catchment has gone dry during the summer on more than one occasion in the past. We will aid in the recovery of the Kofa bighorn herd by establishing a more reliable system of water developments throughout the refuge. Cereus Tank will be a good start towards achieving this objective.

**PROJECT STRATEGIES:**

Redevelop Cereus Tank using industry standard materials and volunteer labor. This project will consist of burying two six foot diameter fiberglass tanks to serve as a storage system (10,000-gallons), connecting it to an six foot deep walk-in drinker and collecting water from a large natural watershed. The level of evaporation will be reduced given the underground storage tanks and water collection will be enhanced through the use of diversion dams on large watersheds.

**PROJECT LOCATION:** T1S R18W, Sec. 1 NE ¼. Elevation 3000 feet

**LAND OWNERSHIP AT PROJECT SITE (Please state specifically if PRIVATE PROPERTY and provide landowner's name):** USFWS, Kofa Refuge.

**IF PRIVATE PROPERTY, IS THERE A STEWARDSHIP AGREEMENT BETWEEN THE LANDOWNER AND THE DEPARTMENT?**

**HABITAT DESCRIPTION:**

Sonoran Desertscrub, Arizona Upland Subdivision.

**ITEMIZED USE OF FUNDS:**

Two fiberglass tanks (6 foot), \$19,000

Six foot walk-in trough, \$3,268

PVC pipe, concrete, wood, misc. building materials, \$5,732.

Equipment cost = \$1,400 ( backhoe rental).

Volunteer labor (ADBSS, 20 members, @ \$14.94 per hour for 16 hours, and 40.5 cents per mile, 10 vehicles, 210miles) = \$5,631.30 minimum.



**LIST COOPERATORS AND DESCRIBE POTENTIAL PARTICIPATION:**

ADBSS volunteers will be asked to provide the labor for this project.

**PROJECT MONITORING PLAN:**

The project will be monitored following the Region IV maintenance protocol. This system will be checked one or more times during the cool season (Nov. through March) and on a monthly basis thereafter. A Trail Master camera system will be used to document use on the new system.

**PROJECT MAINTENANCE:**

This system will require minimal maintenance once completed. We expect water hauling not to be needed after the system fills with rainwater. The collection point above the dam will be cleared of sand as required, usually once or twice a year by a wildlife manager or refuge personnel.

**PROJECT COMPLETION REPORT TO BE FILED BY:** John Hervert

**WATER DEVELOPMENT PROJECTS (see attached worksheet):**

**TREE SHEARING (AGRA-AXE, PUSH) PROJECTS (see attached worksheet):**

## **ARIZONA GAME AND FISH DEPARTMENT** **WATER DEVELOPMENT WORKSHEET**

**PROJECT NAME:** Cereus Tank

- 1) **Is the water development listed as a priority in the most recent “Wildlife Water Development Annual Implementation Schedule?”** No. The recent 39 % decline in the Kofa bighorn population has created an urgency to fix the problem as soon as possible. Refuge waters are not the direct responsibility of the Department and may not appear on our list of priorities. Nonetheless, these waters are important to wildlife and it is within our mission to assist with the redevelopment of refuge waters.
- 2) **Please list the Development Branch personnel and date coordinated with for this project.**  
**Joseph Currie, 3-23-07.**
- 3) **What is the estimated annual inches of precipitation for the area? (mark one)**  
  2-4   ☒4-6   6-8   8-10   10-12   12-14   14-16   >16
- 4) **Is there a perennial water source available to big game within four miles of this project?**  
  ☒YES (please complete #5 below)   NO (skip #5 below)
- 5) **For the accessible, perennial water source nearest this project:**  
Name of water source: Tunnel Mine Spring  
Type of water source (catchment, spring, dirt tank, etc.): Natural  
Ownership of water source: USFWS  
Distance in miles from project: 3 miles
- 6) **Is the target wildlife species a result of transplant efforts?**   YES   ☒NO
- 7) **Please list any special land management status for the project site (i.e. Wilderness, National Park, National Monument, etc). If private land, list landowner. Wilderness, Refuge.**
- 8) **Please provide the following information about access to the proposed site:**  
Type of access (mark one):   2x4 vehicles   ☒4x4 only   foot only\*\*  
\*\*If foot access only: Distance in miles:   Approx. hiking time:  
  
-- Does access to this site require crossing private or tribal lands?   YES   ☒NO  
  
-- Please describe any restrictions to public access:  
  
9) **Please list below (or on a separate sheet) the material type and dimensions of each component proposed to be added, modified, or repaired.**

Fiberglass tanks, six foot diameter, and six foot deep trough standard.

- 10) **Was a site visit completed?**    Yes   ☒No